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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,535	03/07/2002	Kosuke Haruki	04329.2759	8372

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Washington, DC 20005-3315

EXAMINER

MISTRY, O NEAL RAJAN

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/091,535

Applicant(s)

HARUKI, KOSUKE

Examiner

O'Neal R Mistry

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 07 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9, 11 and 14 is/are rejected.
- 7) ☐ Claim(s) 5, 10, 12, 13 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This application has been examined.
2. Claims 1-16 are presented for examination.

Drawings

3. The Examiner contends that the drawings submitted on 03/07/2002 are acceptable for the examination proceedings.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1,2,6,7, 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Higurashi et al (U.S. Patent Number 6,834,349).
5. In regards to claim 1, Higurashi discloses an information system for processing digital information including contents information inserted with a digital watermark information (col. 6 line 20-25) and identification information for the contents information (Figure 19 item 61, Note the examiner interprets that is video pack which contains id information) the information system comprising:

a first verification device which detects the digital watermark information from the digital information (Figure 24, col. 17 line 1-3), and verifies validity of use of the contents

information when the digital watermark information is detected (Figure 24 item 511, Note the examiner interprets that the system has different permission for the content, so the digital watermark contains all the content information); and

a second verification device which verifies the validity of the use of the contents information by using the identification information (Figure 3 item 32, Note the ID information is located in the header of the frame) when the validity is confirmed by the first verification device (Figure 24 item 512, Note the examiner interprets the EMI, encryption mode indicator, col. 16 line 45-60).

6. In regards to claim 2, Higurashi discloses a registration device which registers the identification information for the contents information whose validity has been confirmed by the first verification device (Figure 22 items 302a, item 316a, item 321a, Note the examiner interprets these steps for storing the ID information. The first step 302a is used to detect if the WM bit is equal '11' or prohibited copy, if not then the system moves to the next step, step 316a is used to detect WM bit is equal '10' or one-time copy, if not then the system moves the next step, step 320a is used to detect WM bit is equal to '00' or copyable, then the system moves to the next step where the system does not allows copies to be made. The examiner finds these steps relevant because if the system does not find the WM equal any of the bits, then the system will determine the information of content copy protected and will not allow copies. In addition, these step exemplify that how the system uses the stored ID information of the data and checks the WM verification. The Id information is related to Figure 3 item 32,

and right item 32 is item 33 & 34 which is used for WM detection, so the ID information is connected to WM information of the sector),

wherein the second verification device verifies the validity of the contents information with respect to the contents information corresponding to the identification information registered by the registration device instead of the first verification device (Figure 23 item 505, The EMI detector. Note the examiner interprets that EMI is a second verification device or then the CGMS. The EMI has a different set of bits to compare for copy permission. Figure 24 item 512, item 514, item 515. The EMI used also compares the bits, in the step, other than using CGMS. In conclusion the examiner interprets that second verification device verifies the content instead of using the first verification device.).

7. In regards to claim 6, Higurashi discloses a ripping device, which executes ripping of the contents information whose validity, has been confirmed by the first verification device or the second verification device (col. 2 line 8-15).

8. In regards to claim 7, Higurashi discloses a method of protecting digital information including contents information inserted with a digital watermark information (col. 6 line 20-25) and identification information for the contents information in an information system (Figure 6, Note the CGMS table which states all the permission), the method comprising:

detecting the digital watermark information from the digital information (Figure 24 item 510), and using the digital watermark information to verify validity of use of the contents information (col. 6 line 25-35, Note the examiner interprets that the copy

privileges are disclosed in binary form that deciphers and verify validity of use of the content information); and

using the identification information (Figure 3 item 32) included in the digital information whose validity has been confirmed using the digital watermark information (Figure 24 item 510, item 512) and verifying the validity of the use of the contents information (col. 16 line 50-65, Note the examiner interprets the table illustrates all the permissions of digital content).

9. In regards to claim 8, Higurashi discloses registering the identification information included in the digital information whose validity has been confirmed using the digital watermark information (Figure 22 items 302a, item 316a, item 321a, Note the examiner interprets these steps for storing the ID information. The first step 302a is used to detect if the WM bit is equal '11' or prohibited copy, if not then the system moves to the next step, step 316a is used to detect WM bit is equal '10' or one-time copy, if not then the system moves the next step, step 320a is used to detect WM bit is equal to '00' or copyable, then the system moves to the next step where the system does not allows copies to be made. The examiner finds these steps relevant because if the system does not find the WM equal any of the bits, then the system will determine the information of content copy protected and will not allow copies. In addition, these step exemplify that how the system uses the stored ID information of the data and checks the WM verification. The Id information is related to Figure 3 item 32, and right item 32 is item 33 & 34 which is used for WM detection, so the ID information is connected to WM information of the sector); and

using the identification information to verify the validity of the contents information as a verification object without using the digital watermark information(Figure 23 item 505, The EMI detector. Note the examiner interprets that EMI is a second verification device or then the CGMS. The EMI has a different set of bits to compare for copy permission. Figure 24 item 512, item 514, item 515. The EMI used this to compare the bits, within the step, without using CGMS. In conclusion the examiner interprets that second verification device verifies the content instead of using the digital watermark information.), when the identification information for the contents information as the verification object is registered (Figure 6, Table CGMS shows all the content information.).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 4, 9, 11, 14, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Higurashi et al (U.S. Patent Number 6,834,349) in view of Fridrich (U.S. Patent Number 6,101,602).

11. In regards to claim 4, Higurashi discloses a system that checks for digital watermark content permission information, for allowing copies to be made of digital data. In addition, Higurashi teaches verifies the validity of the use of the contents information based on a collation result of the partial information (col. 17 line 1-3, Note the system checks for content information, in each sector which falls under check partial information. The examiner interprets that if all the information is being checked, that means that some of the information is being checked, which is interpreted as partial information of comparing digital rights, In addition col. 6 line 25-30 teach the different types of permissions).

The difference between the claims and Higurashi is the claims recite "the second verification device designates partial information included in the contents information corresponding to the identification information at random, without executing detection processing of the digital watermark information ".

Fridrich teaches a watermarking digital data for determine authenticity similar to that of Higurashi. In addition, Fridrich further teaches the second verification device designates partial information included in the contents information corresponding to the identification information at random, without executing detection processing of the digital watermark information. (col. 8 lines 24-26, Note the examiner interprets that in the prior art the first system watermarks only a certain number of video sectors, and the sectors

where the digital watermark are located are placed randomly by a means of password.

In conclusion, the examiner construe the password allows only an algorithm to detect the verification of certain sectors, without going throw all the sectors and searching for every watermark located in each sector. The examiner also interprets that prior art uses the term watermark, only for verifying the content is original, where as the examiner interprets that the applicants uses the term watermark for the purpose extracting information for permission. Fridrich's term of watermark is just used for verification.)

It would have been obvious to one of ordinary skill in the art, having the teachings of Higurashi and Fridrich before him at the time the invention was made, to modify the searching of entire sectors taught by Higurashi to include the a system for randomly searching sectors of Fridrich, in order to obtain a system that allows a random search of sectors for content permission.

One would have been motivated to make such a combination because by using this system, the digital watermarks are completely resistant to attacks and would allows to free up system resources would have been obtained, as taught by Fridrich.

12. In regards to claim 9, Higurashi discloses Higurashi teaches a system that checks for digital watermark content permission information, for allowing copies to be made of digital data. In addition, Higurashi teaches verifying the validity of the use of the contents information based on a collation result of the partial information (col. 17 line 1-3, Note the system checks for content information, in each sector which falls under check partial information. The examiner interprets that if all the information is being checked, that means that some of the information is being checked, which is interpreted

as partial information of comparing digital rights, In addition col. 6 line 25-30 teach the different types of permissions), and using the identification information (Figure 3 item 32, Note the ID information about the sector) included in the digital information whose validity has been confirmed using the digital watermark information (Figure 24 item 510

The difference between the claims and Higurashi is the claims recite "designating partial information included in the contents information as a verification object at random".

Fridrich teaches a watermarking digital data for determine authenticity similar to that of Higurashi. In addition, Fridrich further teaches designating partial information included in the contents information as a verification object at random (col. 8 lines 24-26, Note the examiner interprets partial information as not be able to search all the sectors for watermark information.)

It would have been obvious to one of ordinary skill in the art, having the teachings of Higurashi and Fridrich before him at the time the invention was made, to modify the searching of entire sectors taught by Higurashi to include the a system for randomly searching sectors of Fridrich, in order to obtain a system that allows a random search of sectors for content permission.

One would have been motivated to make such a combination because by using this system, the digital watermarks are completely resistant to attacks and would allows to free up system resources would have been obtained, as taught by Fridrich.

13. In regards to claims 11 & 15, Higurashi teaches a system that checks for digital watermark content permission information, for allowing copies to be made of digital

data. In addition, Higurashi teaches an information system for processing digital information including contents information inserted with a digital watermark information and identification information for the contents information, the digital information system comprising:

a verification device which uses the digital watermark information detected by the detection device to verify validity of the contents information (Figure 24, Note the system checks for a WM permission and then check for EMI permission, and the permissions of the data are described in col. 16 lines 50-65, and in Figure 6 CGMS table.), and to detect the digital watermark information (col. 17 line 1-3).

The difference between the claims and Higurashi is the claims recite "a detection device to set a data region for a predetermined number of sectors at random in a format in which the data region of the contents information corresponding to the identification information is divided into a plurality of sectors, to determine sector information for the number of sectors as a detection object range,"

Fridrich teaches a watermarking digital data for determine authenticity similar to that of Higurashi. In addition, Fridrich further teaches a detection device to set a data region for a predetermined number of sectors at random in a format in which the data region of the contents information corresponding to the identification information is divided into a plurality of sectors, to determine sector information for the number of sectors as a detection object range (col. 8 lines 21-35, Note the examiner interprets the claim in regards to the specification where system selects random sectors for verify the watermark information. All sectors are not verified by the watermark information

because it would make a larger burden on the system, so instead at the random sectors are checked instead of all the sectors to less burden the system. The prior states the a similar function.).

It would have been obvious to one of ordinary skill in the art, having the teachings of Higurashi and Fridrich before him at the time the invention was made, to modify the verifying all the sectors taught by Higurashi to include the a verification of certain sectors of Fridrich, in order to obtain a system that has the ability to verify all sectors for WM efficiency, or verify only a certain number of sectors.

One would have been motivated to make such a combination because it would allow a system to perform better if the verification was less and cause less burden on the system, as taught by Fridrich.

14. In regards to claim 14, Higurashi discloses a ripping device to execute ripping of the contents information whose validity has been confirmed by the verification device (col. 2 line 8-15).

Allowable Subject Matter

15. Claims 3, 5, 10, 12, 13, & 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. In regards to claim 3, the prior art does not state the registration device associates and registers, in a table, said identification information, a random number value for randomly designating sector information included in the contents information corresponding to the identification information, and the sector information in a table.

The closest prior art discloses identification number corresponding to track information, but does not disclose a random number and sector information. Other patent publication state random number and sector information, but does discloses ID information corresponding to the track or data.

17. In regards to claims 5 & 10, the prior art does not state a registration device which associates and registers the identification information for the contents information whose validity has been confirmed by the first verification device,

a random number value for designating sector information included in the contents information corresponding to the identification information at random, and the sector information in a table,

wherein the second verification device refers to the table to search for the random number value and the sector information associated with the identification information which agrees with the identification information for the contents information as a verification object without executing detection processing of the digital watermark information, and

acquires the sector information designated by the random number value from the contents information as the verification object, and verifies the validity of the use of the contents information as the verification object based on a collation result of the sector information with the sector information registered in the table.

The closest prior art discloses the system that uses the digital watermark information to check for content information. The watermark has information permission stored in memory. The watermark is compared on all the permission and the permission

falls in one of the categories then the system performs that function. The system of Higurashi in combination with Fridrich allows the system to randomly place the content permission in certain sectors for system improvement purposes. The combination does teach or suggest having a random value with sector information and also ID information corresponding to the watermarks. The system does teach random number corresponding to the sectors but no ID information of the data.

18. In regards to claim 12 & 16, the closes prior art does teach a random number generation device which generates a random number value,

wherein the detection device designates a sector address using the random number value, and detects the digital watermark information from the detection object range of the contents information for the predetermined number of sectors in which the sector address is determined as a head sector.

The closest prior art does a generating a random number value, but does not teach the for detect a range of sectors. There are many patents that use the random number values for a specific sector for authenticate watermark information, but there are none that use the a random number for a range of sectors for authenticating watermark information.

19. In regards to claim 13, the closest prior art does not teach the detection device designates the sector address by the random number value, when the random number value exceeds a predetermined threshold value, and detects the digital watermark information from the detection object range of the contents information for the

predetermined number of sectors in which the sector address is determined as the head sector.

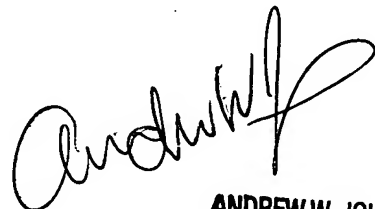
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to O'Neal R Mistry whose telephone number is (703) 305-4675. The examiner can normally be reached on 9am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh M Mehta can be reached on (703) 308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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